

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2004-172586

(43)Date of publication of application : 17.06.2004

(51)Int.Cl.

H01L 33/00

(21)Application number : 2003-351634

(71)Applicant : MATSUSHITA ELECTRIC IND
CO LTD

(22)Date of filing : 10.10.2003

(72)Inventor : YANO TADASHI
SHIMIZU MASANORI
MATSUI NOBUYUKI
SETOMOTO TATSUMI
TAMURA TETSUSHI

(30)Priority

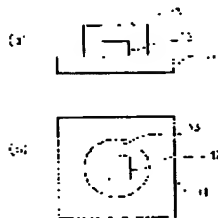
Priority number : 2002324313 Priority date : 07.11.2002 Priority country : JP

(54) LED ILLUMINATION LIGHT SOURCE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide an LED illumination light source with the reduced unevenness of colors.

SOLUTION: An LED illumination light source is provided with a substrate 11, an LED element 12 that is flip-chip mounted on the substrate 11, and a resin portion 13 covering the LED element 12 and containing phosphor converting the light emitted from the LED element 12 into the light having the wavelength longer than the wavelength of this light. The resin portion 13 has sides clear of the surface capable of reflecting the light outgoing from the resin portion 13. These sides comprise the faces surrounding the side portions of the LED element 12, and at least a part of the faces includes a curved surface.



LEGAL STATUS

[Date of request for examination]

07.07.2005

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

BEST AVAILABLE COPY

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]